REMARKS

Claims 24-37 and 39-58 are currently pending with claims 24 and 58 being independent. The Office Action maintains that the independent claims are obvious over U.S. Pat. No. 7,321,932 ("Monga") in view of U.S. Pat. No. 7,345,991 ("Shabtay"). However, the rejections mischaracterize both the claimed invention and the cited art. Neither of these cited references teaches or suggests every limitation of the claims.

The claimed invention provides a system and method for protecting first and second communication networks interconnected by an Automatic Switched Transport Network (ASTN) having an ASTN control plane. Particularly, each of a first communication network and a second communication network communicate via respective primary and secondary terminal nodes. Under normal operating conditions, the primary terminal node of the first network connects to, and communicates with, the primary terminal node of the second communication network over a primary communication circuit. However, responsive to a failed interconnection of the primary terminal nodes, the secondary terminal nodes are configured to establish a secondary communication circuit.

To this end, both independent claims recite an "ASTN control plane configured to implement "signaling and automatic polling mechanisms to switch traffic from the first and second primary terminal nodes to the first and second secondary terminal nodes responsive to the failed interconnection between the first and second primary terminal nodes." The Office Action alleges that the "link state advertisements" (LSAs) disclosed in Monga equate to the "automatic polling mechanisms" of the independent claims. However, this assertion is conclusory and wholly unsupported by the references. The LSAs of Monga are not the claimed automatic polling mechanisms, nor does Monga teach or suggest that the disclosed LSAs perform the same function as the claimed automatic polling mechanisms.

As defined in the specification, the claimed automatic polling mechanisms operate between the corresponding primary and secondary terminal nodes in the respective first and second networks (e.g., heartbeat messages or signals). *Spec.*, p. 9, ¶2. With the claimed invention, the automatic polling mechanisms are used to detect when a node has failed, as well as to verify when the node has been restored. The automatic polling mechanisms also support a switch back protocol to switch communications between the corresponding primary and secondary terminal nodes. *Spec.*, p. 13, ¶2.

In contrast, the LSAs disclosed in Monga provide no such functionality. According to Monga, the *LSAs hold information about the state of a link or device and are stored in memory* at an Automatic Switched Optical Network (ASON) device. Thus, LSAs are data (e.g., records or data objects). The LSAs are distributed in messages to other devices, but they are not sent between corresponding network nodes in respective, different networks, as claimed. Rather, Monga expressly discloses that the LSAs are distributed from the ASON device to peer devices connected to a network device (i.e., an OSA-enabled device). As in Monga:

> [B]ecause *link state advertisements are stored by the ASON device* rather than in the user domain, the ASON device can detect a failure of its directly attached OSA-enabled user and *invalidate the link state advertisement for the OSA-enabled user, thus allowing peer users to more quickly detect the failure of the OSA-enabled user* (otherwise, the peer users would need to wait for a link state advertisement timeout to detect the failure, which, in OSPF, is typically a MaxAge of 1 hour).

Monga, col. 12, line 62 – col.. 13, ln. 2 (emphasis added). Thus, the ASON device stores an LSA associated with a particular OSA-enabled user device (which is a *network* router device – *see Monga*, col. 4, ll. 447-51), to which the peer devices (i.e., the end users) are connected. If the ASON device determines that a particular OSA-enabled device has failed, it updates the corresponding data for that OSA-enabled device (i.e., the corresponding LSA) to reflect that failure. Thereafter, that updated LSA may be proactively distributed to the peer devices to

inform them of that failure – lest the peer devices wait for a timeout indication from the affected OSA-enabled user device.

Put in simpler terms, the claimed automatic polling mechanisms are periodic messages or signals that are sent by one primary (or secondary) terminal node in a first communications network and acknowledged by corresponding primary (or secondary) terminal node in a second communications network. The mere absence (or presence) of these mechanisms are used to detect a failure, as well as to restore communications once the failure has been corrected. The LSAs of Monga, in contrast, are stored data that are distributed by a central network device (i.e., the ASON device) to peer devices connected to a network device (i.e., an OSA-enabled user device). These two concepts are not the same, and one does not teach or suggest the other.

In the Final Office Action, the Examiner reasons that the LSAs equate to the automatic polling mechanisms and asserts that "in the broadest reasonable interpretation, a poll is simply a message being sent." *Final Office Action*, p. 2, ll. 3-4. The Examiner then asserts that the claims do not require any specific interpretation of polling, and thus, takes license to advance any particular interpretation of that term that is needed to reject the claim.

Indeed, the interpretation is patently improper. If one were to accept the Examiner's assertion (i.e., that a poll is simply a message being sent), then virtually *all* messages communicated across a network would be polling messages – including those that are used to set up and tear down communication sessions. Therefore, not only is the proffered interpretation of the claim language unreasonable, it contradicts the well-understood meaning of the term "poll" and blatantly ignores Applicant's use of that term in the claims and in the specification (*e.g., Spec.*, p. 9, ¶2).

Moreover, the art cited by the Examiner utterly fails to support the asserted interpretation. As evidenced above, Monga does not teach or suggest an automatic polling mechanism that is used to switch traffic from between a pair of primary nodes residing in two

respective networks to a pair of secondary nodes in the two networks. Nor does Shabtay, and the Office Action does not assert otherwise. Accordingly, since both references alone fail to teach or suggest this aspect of the claims, their combination also fails to teach or suggest this limitation of the claims.

The above facts notwithstanding, there is another reason why the cited references fail to render the independent claims obvious. Specifically, both claims 24 and 58 recite, "the criteria for switching the traffic to the secondary communication circuit are based on alarm monitoring on a client side of the ASTN network." Neither reference, alone or in combination, teaches or suggests this limitation.

In the Office Action, the Examiner alleges that the above cited passage of Monga discloses this aspect of the claims (*i.e.,Monga*, col. 12, ll. 62-65). However, this passage discloses only that a network device (i.e., the ASON device) sends informational messages (i.e., the updated and stored LSAs) to a peer device (e.g., a mobile terminal) to *proactively* inform that peer device of a network device failure, and to *disable* the affected OSA-enabled user device. There is no mention whatsoever of switching criteria or client-side alarm monitoring of the ASTN network, as claimed.

Applicant notes that the Examiner also cites column 18, lines 22-29 of Monga to support the assertion. However, that passage also utterly fails to support the allegations. For reference:

> Each ASON device monitors the connection to its corresponding OSA-enabled user. If the ASON device detects loss or degradation of the connection to the OSA-enabled user (e.g., due to a failure of the ASON UNI, the bearer channel, or the OSA-enabled device itself), then the ASON device sends a leave message to the OSS to remove the OSA-enabled user from the peer group.

Monga, col. 18, ll. 22-29.

This passage simply discloses the ability of the ASON device to monitor the connection to a client device (i.e., the OSA-enabled user device, which may be a network router, for example). However, the ASON device is ***not*** a client device. Rather, it is a network device.

Thus, to the extent that Monga discloses monitoring, it is performed within the realm of the ASON network. Further, the vague reference to the ability of the ASON device to monitor the "loss or degradation of the connection" does not save the allegation. There are many different ways that one network device can detect the loss or degradation of a connection to another network device that have nothing to do with monitoring for an alarm. For example, many network devices perform complicated measurements and calculations to compute a bit error rate or noise level, and then compare the computed values to predetermined threshold values. However, none of these methods would ever be considered by those of ordinary skill in the art to equate to "alarm monitoring on a client side of the ASTN network," as claimed.

Therefore, Monga also fails to teach or suggest this limitation as well. And Shabtay is cited only because it allegedly discloses secondary edge nodes. *See Final Office Action*, p. 3, ¶4. Therefore, the failure of each reference alone to teach or suggest this additional limitation of the independent claims necessarily means that any combination of the two also fails to teach or suggest this element. Accordingly, independent claims 24 and 58 are non-obvious over the cited references for at least this additional reason, as are their respective dependent claims.

Finally, the Office Action cites U.S. Pat. App. Pub. No. 2002/0085571 ("Meandzjia") or (U.S. Pat. App. Pub. No. 2003/0206515 ("Licata") in addition to Monga and Shabtay to support §103(a) rejections to some of the dependent claims. However, in view of the references' failure to render the independent claims obvious, all dependent claims are also non-obvious over the cited references.

In light of the foregoing remarks, all pending claims are in immediate condition for

allowance. As such, Applicant respectfully requests the allowance of all pending claims.

Respectfully submitted,

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